

We Claim:

1. A device for detecting an edge of a recording material in an exposer for recording printing originals, comprising:

an exposure drum having a surface for holding the recording material at said surface;

an exposure head axially displaceable along said exposure drum and focusing exposure beams onto the recording material;

an optical fiber disposed at said surface of said exposure drum, said optical fiber having at least one end;

an illuminating device radiating light radially into said optical fiber; and

a photodetector disposed at said end of said optical fiber, said photodetector receiving light radiated into said optical fiber.

2. The device according to claim 1, wherein said optical fiber is embedded in said surface of said exposure drum.

3. The device according to claim 1, wherein the recording material is a printing plate and the exposer is an external drum exposer.

4. The device according to claim 1, wherein said photodetector detects an edge of the recording material by detecting the recording material covering the light being radiated into said optical fiber.

5. The device according to claim 1, wherein said illuminating device and said exposure head are connected fixedly to one another.

6. The device according to claim 1, wherein said optical fiber is a fluorescent optical fiber.

7. The device according to claim 1, wherein:

one of said exposure beams is an illuminating beam; and

said illuminating device is said illuminating beam radiating light into said optical fiber.

8. The device according to claim 1, wherein said illuminating device is an illuminating beam radiating light into said optical fiber.

9. The device according to claim 1, further comprising a modulator disposed between said illuminating device and said

optical fiber and modulating said light radiated into said optical fiber.

10. A device for detecting an edge of a printing plate in an external drum exposer for recording printing originals, comprising:

an exposure drum having a surface for holding the printing plate at said surface;

an exposure head axially displaceable along said exposure drum and focusing exposure beams onto the printing plate;

an optical fiber disposed at said surface of said exposure drum, said optical fiber having at least one end;

an illuminating device radiating light radially into said optical fiber; and

a photodetector disposed at said end of said optical fiber, said photodetector receiving light radiated into said optical fiber.

11. A device for detecting the edge of a recording material in an exposer for recording printing originals, comprising:

an exposure drum having a surface for holding the recording material at said surface;

an exposure head axially displaceable along said exposure drum and focusing exposure beams onto the recording material;

an optical fiber disposed at said surface of said exposure drum and having at least one end;

a light source disposed at said end of said optical fiber and radiating light axially into said optical fiber; and

an optical detector receiving light emitted radially by said optical fiber.

12. The device according to claim 11, wherein said optical fiber is embedded in said surface of said exposure drum.

13. The device according to claim 11, wherein the recording material is a printing plate and the exposer is an external drum exposer.

14. The device according to claim 11, wherein said optical detector detects an edge of the recording material by detecting the recording material covering the light being emitted from said optical fiber.

15. The device according to claim 11, wherein said optical detector and said exposure head are connected fixedly to one another.

16. The device according to claim 11, wherein said optical fiber is a fluorescent optical fiber.

17. The device according to claims 11, further comprising a modulator disposed between said optical fiber and said light source and modulating the light radiated into said optical fiber.

18. A device for detecting the edge of a printing plate in an external drum exposer for recording printing originals, comprising:

an exposure drum having a surface for holding the printing plate at said surface;

an exposure head axially displaceable along said exposure drum and focusing exposure beams onto the printing plate;

an optical fiber disposed at said surface of said exposure drum and having at least one end;

a light source disposed at said end of said optical fiber and radiating light axially into said optical fiber; and

an optical detector receiving light emitted radially by said optical fiber.

19. A device for detecting the edge of a recording material in an exposurer for recording printing originals, comprising:

an exposure drum having a surface for holding the recording material at said surface;

an exposure head axially displaceable along said exposure drum and focusing exposure beams onto the recording material;

a luminous strip disposed at said surface of said exposure drum; and

an optical detector receiving light emitted radially by said luminous strip.

20. The device according to claim 19, wherein said luminous strip is embedded in said surface of said exposure drum.

21. The device according to claim 19, wherein the recording material is a printing plate and the exposers is an external drum exposer.

22. The device according to claim 19, wherein said luminous strip has organic light-emitting diodes.

23. The device according to claim 19, wherein said luminous strip is formed of organic light-emitting diodes.

24. The device according to claim 19, wherein said luminous strip has luminous nanostructures.

25. The device according to claim 19, wherein said luminous strip is formed of luminous nanostructures.

26. A device for detecting the edge of a printing plate in an external drum exposer for recording printing originals, comprising:

an exposure drum having a surface for holding the printing plate at said surface;

an exposure head axially displaceable along said exposure drum and focusing exposure beams onto the printing plate;

a luminous strip disposed at said surface of said exposure drum; and

an optical detector receiving light emitted radially by said luminous strip.

27. A method for detecting an edge of a recording material in an exposer for recording printing originals, which comprises:

holding the recording material at an exposure drum;

providing an axially displaceable exposure head at the exposure drum, the exposure head focusing exposure beams onto the recording material;

disposing an optical fiber at a surface of the exposure drum;

fitting a photodetector at an end of the optical fiber;

radially radiating light from an illuminating device into the optical fiber; and

detecting an edge of the recording material by receiving light radiated into the optical fiber with a photodetector.



28. The method according to claim 27, which further comprises embedding the optical fiber in the surface of the exposure drum.

29. The method according to claim 27, which further comprises detecting the edge of the recording material by covering the light radiated into the optical fiber with the edge of the recording material.

30. The method according to claim 27, which further comprises modulating the light radiated into the optical fiber.

31. The method according to claim 27, which further comprises axially moving the illuminating device along the exposure drum with a feed drive.

32. The method according to claim 31, which further comprises counting the cycles of the feed drive to determine an axial position of the edge of the recording material.

33. A method for detecting an edge of a printing plate in an external drum exposer for recording printing originals, which comprises:

holding the printing plate at an exposure drum;

providing an axially displaceable exposure head at the exposure drum, the exposure head focusing exposure beams onto the printing plate;

disposing an optical fiber at a surface of the exposure drum;

fitting a photodetector at an end of the optical fiber;

radially radiating light from an illuminating device into the optical fiber; and

detecting an edge of the printing plate by receiving light radiated into the optical fiber with a photodetector.

34. A method for detecting an edge of a recording material held at an exposure drum in an exposer for recording printing originals, an exposure head focusing exposure beams onto the recording material, which comprises:

disposing an optical fiber at a surface of the exposure drum;

fitting a photodetector at an end of the optical fiber;

radially radiating light from an illuminating device into the optical fiber; and

detecting an edge of the recording material by receiving light radiated into the optical fiber with a photodetector.

35. A method for detecting an edge of a recording material in an exposer for recording printing originals, comprising:

holding the recording material at an exposure drum;

providing an axially displaceable exposure head at the exposure drum, the exposure head focusing exposure beams onto the recording material;

disposing an optical fiber at a surface of the exposure drum;

axially radiating light from a light source into the optical fiber; and

detecting an edge of the recording material by receiving, with an optical detector, the light radially emitted by the optical fiber.

36. The method according to claim 35, which further comprises detecting the edge of the recording material by covering the light radiated from the optical fiber with the edge of the recording material.

37. The method according to claim 35, which further comprises modulating the light radiated into the optical fiber.

38. The method according to claim 35, which further comprises axially moving the optical detector along the exposure drum with a feed drive.

39. The method according to claim 35, which further comprises counting the cycles of the feed drive to determine an axial position of the edge of the recording material.

40. A method for detecting an edge of a printing plate in an external drum exposer for recording printing originals, comprising:

holding the printing plate at an exposure drum;

providing an axially displaceable exposure head at the exposure drum, the exposure head focusing exposure beams onto the printing plate;

disposing an optical fiber at a surface of the exposure drum;

axially radiating light from a light source into the optical fiber; and

detecting an edge of the printing plate by receiving, with an optical detector, the light radially emitted by the optical fiber.

41. A method for detecting an edge of a recording material held at an exposure drum in an exposer for recording printing originals, an exposure head focusing exposure beams onto the recording material, which comprises:

disposing an optical fiber at a surface of the exposure drum;

axially radiating light from a light source into the optical fiber; and

detecting an edge of the recording material by receiving, with an optical detector, the light radially emitted by the optical fiber.